- 18-21. (Canceled).
- 22. (Withdrawn): A process for the purification of riboflavin comprising the steps of:
 - (a) precipitating a first crystalline form of riboflavin,
 - (b) isolating the first crystalline form of riboflavin,
- (c) transforming the first crystalline form of riboflavin into a second crystalline form of riboflavin under conditions that decompose diluted DNA, wherein the transforming is performed at a temperature of between 60°C and 75°C using (i) a mineral acid, (ii) a base, or (iii) an organic acid, and
- (d) isolating the second crystalline form of riboflavin, provided that at ambient temperature the first crystalline form of riboflavin is thermodynamically less stable than the second crystalline form of riboflavin.
- 23. (Withdrawn): The process according to claim 22, characterized in that the amount of DNA in the riboflavin crystals of step (d) is below about 0.2 parts per billion.
- 24. (Withdrawn): The process according to claim 22, characterized in that the first crystalline form of riboflavin is riboflavin dihydrate.
- 25. (Withdrawn): The process according to claim 22, characterized in that the riboflavin crystals of the second crystalline form of riboflavin of step (d) are riboflavin anhydrate I crystals.
- 26. (Withdrawn): The process according to claim 22, characterized in that in step (a) the precipitation of the first crystalline form of riboflavin is induced by addition of seed crystals.
- 27. (Withdrawn): The process according to claim 26, characterized in that the seed crystals are seed crystals of riboflavin dihydrate or seed crystals of riboflavin monohydrate.

- 28. (Withdrawn): The process according to claim 22, characterized in that after step (b) the process further comprises the step of pasteurizing the first crystalline form of riboflavin before transforming the first crystalline form in step (c).
- 29. (Withdrawn): The process according to claim 22, characterized in that step (c) is performed at a temperature of between 60°C and 75°C using:
 - (i) a mineral acid,
 - (ii) a base, or
 - (iii) an organic acid.
- 30. (Withdrawn): The ,process according to claim 22, characterized in that in step (c) a slurry comprising the first crystalline form of riboflavin is pumped continuously through a heat exchanger and further pumped through a tube equipped with a jacket heating and either a multistage stirring system or static mixers.
- 31. (Withdrawn): A process for the purification of riboflavin comprising the steps of:
 - (a) precipitating a first crystalline form of riboflavin,
 - (b) isolating the first crystalline form of riboflavin,
- (c) transforming the first crystalline form of riboflavin into a second crystalline form of riboflavin under conditions that decompose diluted DNA, wherein a slurry comprising the first crystalline form of riboflavin is pumped continuously through a heat exchanger and further pumped through a tube equipped with a jacket heating and either a multistage stirring system or static mixers, and

- (d) isolating the second crystalline form 'of riboflavin, provided that at ambient temperature the first crystalline form of riboflavin is thermodynamically less stable than the second crystalline form of riboflavin.
- 32. (Withdrawn): A process for decreasing the DNA content of riboflavin crystals comprising the steps of:
 - (a) fermentatively producing riboflavin in a fermentation broth,
- (b) precipitating and isolating riboflavin crystals of a first crystalline form of riboflavin from the fermentation broth,
- (c) transforming the crystals of step (b) into a second crystalline form of riboflavin which is a thermodynamically more stable form of riboflavin than the first crystalline form, and
 - (d) isolating the crystals of step (c).
- 33. (Withdrawn): The process according to claim 32, characterized in that the amount of DNA in the riboflavin crystals of step (d) is below about 0.2 parts per billion.
- 34. (Withdrawn): The process according to claim 32, characterized in that the first crystalline form' of riboflavin is riboflavin dihydrate.
- 35. (Withdrawn): The process according to claim 32, characterized in that the riboflavin crystals of step (d) are riboflavin anhydrate I crystals.
- 36. (Withdrawn): The process according to claim 32, characterized in that in step (b) the precipitation of the first crystalline form of riboflavin is induced by addition of seed crystals to the fermentation broth.
- 37. (Withdrawn): The process according to claim 36, characterized in that the seed crystals are seed crystals of riboflavin dihydrate or seed crystals of riboflavin monohydrate.

Application of Gloor et. al. Application No. 10/565,443 Attorney Docket No. DSM-18-US

- 38. (Withdrawn): The process according to claim 32, characterized in that after step (b) the process further comprises the step of pasteurizing the first crystalline form of riboflavin before transforming the first crystalline form in step (c).
- 39. (Withdrawn): The process according to claim 32, characterized in that step (c) is performed at a temperature of between 60°C and 75°C using:
 - (i) a mineral acid,
 - (ii) a base, or
 - (iii) an organic, acid.
- 40. (Withdrawn): The process according to claim 32, characterized in that in step (c) a slurry comprising the first crystalline form of riboflavin is pumped continuously through a heat exchanger and further pumped through a tube equipped with a jacket heating and either a multistage stirring system or static mixers.
- 41. (Withdrawn-previously presented): A process for removal of DNA from fermentatively produced riboflavin crystals comprising transforming a first crystalline' form of riboflavin obtained from the fermentatively produced crystals into a second crystalline form of riboflavin.